

RULE 116 RESPONSE
U.S. Appln. No. 10/644,830

In the final Office Action mailed December 21, 2005, the examiner refers to MPEP § 2143.01 and states that:

replacing the substituent group R1-R3 of [Fink] with compound of [Mori] does not change the principle of operation of the primary reference or render the reference inoperable for its intended purpose.

However, changing the principle of operation of a reference and rendering a reference inoperable for its intended purpose are not the only two bases by which an applicant may argue a lack of motivation to combine. A lack of motivation to combine may become apparent after careful consideration of the combined teachings of the references. In the present case, the fact that there is a lack of motivation to combine is immediately apparent after careful consideration of the combined teachings of Fink and Mori.

For example, the examiner states in the paragraph bridging pages 2 and 3 of the final Office Action that “it would have been obvious to one of ordinary skill in the art to use the organic compound teaching of Mori to replace the R₁, R₂, and R₃ in Fink’s compound, because it would have created an organic compound having high chemical and thermal stabilities and functions of carrier-transporting property as taught by Mori.”

However, Mori specifically teaches that the effects achieved by its invention (high chemical and thermal stabilities; functions of carrier-transporting property) are strictly related to the fact that its compounds are “composed of only ≥ 18 carbon atoms and F.”

Therefore, there would have been no motivation for a person of ordinary skill in the art, seeking to create an organic compound having high chemical and thermal stabilities and functions of carrier-transporting property, to form a compound containing atoms other than carbon and fluorine, as is necessarily the case by the examiner’s proposed combination of Fink and Mori, given Fink’s compounds’ basic triazine structure.

As a second example, the examiner states at the paragraph bridging pages 6 and 7 of the final Office Action:

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference ... Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." Combining the teachings of references does not involve an ability to combine their specific structures.

However, the statements directly above are excerpts from case law concerning the issue of "physical combinability."

Applicant is not arguing a lack of physical combinability. Instead, Applicant's traversal is based on the exact test identified by the examiner, *i.e.*, what the combined teachings of the references would have suggested to those of ordinary skill in the art. In the present case, after careful consideration of the combined teachings of Fink and Mori, it is clear that one of ordinary skill in the art would not have been motivated to employ the rings taught in Mori as the R groups of Fink's formula (I), for the reasons mentioned above, which have nothing to do with physical combinability.

As a third example, the examiner states at the paragraph bridging pages 6 and 7 of the final Office Action:

Thus, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

In response, Applicant emphasizes that the present traversal is based on a careful consideration of the combined teachings of Fink and Mori.

B. No reasonable expectation of success

As stated in the Response filed November 21, 2005, the examiner has not shown any reasonable expectation of success in combining the cited references.

In the final Office Action mailed December 21, 2005, the examiner states that “obviousness does not require absolute predictability, only a reasonable expectation of success, i.e., a reasonable expectation of obtaining similar properties.”

In response, Applicant points out that the examiner has still not shown a reasonable expectation of success, i.e., a reasonable expectation of obtaining similar properties.

Specifically, Mori teaches that the properties exhibited by its invention (high chemical and thermal stabilities; functions of carrier-transporting property) are strictly related to the fact that its compounds are “composed of only ≥ 18 carbon atoms and F.” The examiner’s proposed combination of Fink and Mori would form a compound containing atoms other than carbon and fluorine, i.e., nitrogen. There can be no reasonable expectation of success, i.e., a reasonable expectation of obtaining similar properties, in taking the aromatic rings shown in Mori and attaching them to the triazine compounds of Fink, especially taking into consideration the large degree of unpredictability in the chemical arts.

C. Conclusion

For the foregoing reasons, Applicant requests reconsideration and withdrawal of the §103 rejection of Claims 1, 3-5, 7-13, and 18-37.

II. REJECTION UNDER 35 U.S.C. § 103

Claims 6 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fink and Mori, as applied in the above claims, and further in view of U.S. Patent No. 6,166,125 (“Sugiyama”).

Applicant respectfully traverses.

As stated in the Response filed November 21, 2005, there is no suggestion to combine the compound disclosed in Fink with the compound taught by Sugiyama.

In the final Office Action mailed December 21, 2005, the examiner states that:

the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant.

The examiner's statement of the law may be correct. However, it does not address Applicant's argument in support of the patentability of Claims 6 and 24, for the following reasons.

Applicant is not arguing that Claims 6 and 24 are patentable because the combination of Fink, Mori and Sugiyama fails to suggest that the same advantage or result discovered by Applicant may be achieved. Instead, Claims 6 and 24 are patentable because, after careful consideration of the combined teachings of Fink, Mori and Sugiyama, there is no reasonable suggestion to combine Fink, Mori and Sugiyama in the first instance.

In this regard, in Fink, the triazine compound is included within a light-emitting layer disposed between a pair of electrodes of an organic electroluminescent device.

On the other hand, the compound taught by Sugiyama is not directed toward the field of an organic electroluminescent element. Sugiyama simply teaches a graded-refractive-index optical plastic material, where the triazine compound is added to plastic to obtain a material having low scattering loss and high thermal resistance.

The effects of organic electroluminescent elements and graded-refractive-index optical plastic materials are clearly different. There is no light emission in the graded-refractive-index optical plastic material of Sugiyama used, for example, as a preform of an optical fiber (column 1, lines 11-14). Also, low scattering loss and high thermal resistance are not relevant to the light-emitting layer of Fink. Thus, there is no reasonable suggestion in the prior art to combine the cited references in the first instance.

Furthermore, on page 15, lines 2-8, of the specification, it is described that Applicant's light-emitting elements demonstrate an effect as an electron transporting material or a host material. Sugiyama does not teach such an effect.

Therefore, there is no suggestion to combine the compound disclosed in Fink with the compound taught by Sugiyama. As there is no such suggestion, there is no motivation for a person of ordinary skill in the art to formulate the claimed compound by combining the applied references. The rejection appears to be based on improper hindsight.

Still further, Claim 6 depends from independent Claim 1 and Claim 24 depends from independent Claim 20. As stated above at Section I of this Response, Claims 1 and 20 are patentable because they are not rendered obvious under §103 by the combination of Fink and Mori. Sugiyama does not cure the deficiencies of Fink and Mori noted at Section I. Therefore, Claims 6 and 24 are also patentable for at least the reasons that Claims 1 and 20 are patentable.

For the foregoing reasons, Applicant requests reconsideration and withdrawal of the §103 rejection of Claims 6 and 24.

III. REJECTION UNDER 35 U.S.C. § 103

Claims 14-17 and 32-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fink and Mori, as applied in the above claims, and further in view of Applicant Admitted Prior Art (APA).

Each of Claims 14-17 depends from Claim 1 and each of Claims 32-35 depends from Claim 20. As stated above at Section I of this Response, Claims 1 and 20 are patentable because they are not rendered obvious under §103 by the combination of Fink and Mori. APA does not cure the deficiencies of Fink and Mori noted at Section I. Therefore, Claims 14-17 and 32-35 are patentable for at least the reasons that Claims 1 and 20 are patentable, respectively.

Applicant requests withdrawal of the §103 rejection of Claims 14-17 and 32-35.

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IV. CONCLUSION

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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23373

CUSTOMER NUMBER

Date: March 21, 2006